

# REQUEST FOR INFORMATION ON POTENTIAL NASA PARTNERSHIPS FOR INDUSTRY-LED DEVELOPMENT OF ROBOTIC LUNAR LANDERS

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## General Information

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Recovery and Reinvestment Act Action?:	NO
Classification Code:	A -- Research and Development
NAICS Code:	336414 - Guided Missile and Space Vehicle Manufacturing
Set-Aside Code:	N/A
Internet Address:	<a href="http://prod.nais.nasa.gov/cgi-bin/eps/bizops.cgi?gr=D&amp;pin=04#156949">http://prod.nais.nasa.gov/cgi-bin/eps/bizops.cgi?gr=D&amp;pin=04#156949</a>

## Office Address

NASA/Goddard Space Flight Center, NASA Headquarters Acquisition Branch,  
Code 210.H, Greenbelt, MD 20771

## Description

REQUEST FOR INFORMATION (RFI): THIS IS \*NOT\* A REQUEST FOR PROPOSAL, QUOTATION, OR INVITATION TO BID NOTICE.

The National Aeronautics and Space Administration (NASA) is continually looking for ways to help advance the development of commercial space products and services. With the recent influx of U.S. private-sector companies interested in space exploration and utilization, NASA is seeking to better understand U.S. industry's interests in a myriad of exploration activities, including the private development of robotic lander capabilities for the lunar surface. To that end, NASA's Advanced Exploration Systems Division in the Human Exploration and Operations Mission Directorate is seeking input through this Request for Information (RFI) that focuses on an industry-developed robotic lander that can be integrated with a launch vehicle for the purposes of supporting commercial (and potentially future NASA) missions. An industry-NASA partnership would:

- Transfer and capitalize on a long history of NASA investments in lander technologies and expertise
- Support a growing commercial interest in robotically delivering payloads to the lunar surface more reliably and cost-effectively than under current models

NASA seeks to better understand U.S. industry's plans for a robotic lunar landing capability that, in addition to serving commercial customers, could also enable science and other missions. Potential services of interest to NASA, including lunar polar volatile prospecting, sample return, and geophysical network deployment, would involve landing two classes of payloads at various sites (including the polar regions) possibly as early as 2018. Small class payloads range from 30 to 100 kg, and medium class payloads range from 250 to 450 kg.

Potential NASA contributions to a partnership with U.S. industry include:

- **Technical Expertise:** NASA envisions that an integrated team comprised of NASA civil servants and the industry partner personnel could work together to design, develop, and test landers.
- **Test Facilities:** NASA can provide industry partners, at no cost, access to testing facilities such as thermal vacuum chambers, clean rooms, etc., as available.
- **Hardware and Software:** NASA may be able to contribute specific hardware and software elements for the development and testing of the lander.

Note that no exchange of funds is envisioned between NASA and the industry partner(s). The type of agreement to be employed for this NASA-industry partnership is to be determined, but options include a Space Act Agreement, Cooperative Research and Development Agreement (CRADA), or other (ref. NASA Policy Directive (NPD) 1050.1I, 15 USC §3710a(d)(1)).

Responses to this RFI should include the following information:

- **Company information:** Company name and address, point-of-contact name, e-mail address, phone number.
- **Feasibility of a partnership:** Is NASA-industry cooperation feasible? What type of arrangement and agreement with NASA are desired by your company and why? Identify any particular considerations, circumstances, or issues that would need to be addressed in an agreement. For example, what are your expectations regarding the allocation of intellectual property rights?
- **Potential industry contributions:** List potential industry contributions that would complement the possible NASA contributions outlined above.
- **Potential NASA contributions:** What expertise and support does your company need from NASA?
- **Services concept:** What commercial activities do you plan to offer if the partnership is successful? Describe the proposed lander, payload accommodations (e.g. mass, volume, power, communications, night survival, rover deployment capability),

mission concept, and operational readiness timeframe. Under your concept, would you or your customer be responsible for obtaining a launch capability?

- **Business model:** What is your intended business strategy for offering commercial services? How many robotic lander missions of interest to the commercial sector have you identified? Have you identified other potential customers for a commercial lunar payload delivery capability in addition to NASA, and how firm is the demand? What revenue model and pricing strategy have you established? How stable is your anticipated income stream?

Responses are limited to no more than 15 pages, and should be submitted via email to the Point of Contact (POC) listed below. The subject line of the submission should be "Lunar Lander RFI" and attachments should be in Microsoft WORD, POWERPOINT, or PDF format. Files should not be greater than 8MB in size. The information is requested for planning purposes only, subject to Federal Acquisition Regulation (FAR) Clause 52.215-3, entitled "Solicitation for Information for Planning Purposes."

It is not NASA's intent to publicly disclose any proprietary information obtained from this RFI. To the full extent that it is protected pursuant to the Freedom of Information Act and other laws and regulations, information identified by a respondent as "Proprietary or Confidential" will be kept confidential. It is emphasized that this RFI is for planning and information purposes only and is NOT to be construed as a commitment by the Government to enter into a contractual or other form of agreement, nor will the Government pay for information solicited. If NASA decides to proceed with a new procurement or partnership announcement, NASA will synopsise its intent on FedBizOpps.

No solicitation exists; therefore, do not request a copy of the solicitation. If a solicitation is released, it will be synopsized in FedBizOpps and on the NASA Acquisition Internet Service.

It is the potential offeror's responsibility to monitor these sites for the release of any solicitation or synopsis.

At its discretion, NASA may hold meetings with respondents as needed to clarify responses and obtain further details.

All questions shall be directed to the POC listed below.

## **Point of Contact**

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